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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/827,323	04/20/2004	Manabu Saito	113539.01	4040

25944 7590 04/11/2007  
OLIFF & BERRIDGE, PLC  
P.O. BOX 19928  
ALEXANDRIA, VA 22320

EXAMINER
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GRAINGER, QUANA MASHELL

ART UNIT	PAPER NUMBER
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2852

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/11/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/827,323

Applicant(s)

SAITO ET AL.

Examiner

Quana M. Grainger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21, 23-29 and 31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-21, 23-28 and 31 is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-12 and 29 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 13 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-3, 6-12, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haneda in view of Fujii et al. Haneda (5,537,188) teaches an image forming apparatus comprising: a latent image forming unit that forms a latent image on an image carrying body 100; and a developing unit 204 that visualizes the latent image formed on the image carrying body by using a developer, wherein a developing housing containing the developer is communicatively connected to a developer replenishment box 204H; and wherein the developer replenishment box is disposed in an upstream of a latent image writing position on the image carrying body (figure 1). The first developer storage portion is connected to the second developer storage via the pipe

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204P. The image forming apparatus further comprising a process cartridge detachably attached to the apparatus body, the process cartridge into which the image carrying body and at least one process unit are incorporated, wherein the process cartridge includes the developer replenishment box. The developer replenishment box 204H is detachably attached to the process cartridge.

The image carrying body cartridge includes at least the image carrying body is detachably attached to the process cartridge.

The process cartridge is attached to and detached from the apparatus body by opening an opening/closing cover provided in an upper part of the apparatus body (figure 5). The image forming apparatus wherein a recording sheet onto which a visual image is transferred from the image carrying body is transported from a lower part to an upper part; and wherein the developer replenishment box 204H is disposed on an upper side of the latent image writing position on the image carrying body (figure 1). The image forming apparatus further comprising a discharge tray (above fixer 123) for accommodating discharged sheets, disposed in an upper part of the developer replenishment box. The image forming apparatus wherein an upper surface housing of the developer replenishment box is an inclined surface inclined in the same direction as of the discharge tray accommodating the recording sheets. The developer replenishment box 204H is capable of containing a larger amount of developer than the developing housing disposed in a lower side of the latent image writing position on the image carrying body. The developer replenishment box 204H is disposed in an upper part of a latent image writing position on the image carrying body; wherein the developing housing is disposed in a lower part of the latent image writing position; and wherein the developer replenishment box 204H is communicatively connected to the developing housing by way of a communicative passage, which makes a detour

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around the latent image writing position (figure 1). Haneda does not teach that the developer replenishment box is above the image carrying body.

Fujii et al. teaches that the black replenishment box should be larger than the other replenishment boxes (figure 1, 10BK). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teaching of Fujii et al. with the image forming apparatus of Haneda and form the black replenishment box as large as the spacing allows to reduce the time of replacement of the black colored developer (Fujii et al., column 2, lines 12-15).

#### ***Allowable Subject Matter***

4. Claims 4-5 and 13-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 17-21, 23-28, and 31 are allowed.

#### ***Response to Arguments***

5. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection. The recitation of a first portion is connected to a second portion has been re-evaluated. The claims remain rejected as discussed above.

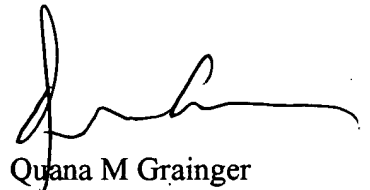
#### ***Contact Information***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quana M. Grainger whose telephone number is 571-272-2135. The examiner can normally be reached on 8am-6pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Gray can be reached on 571-272-2119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Quana M Grainger  
Primary Examiner  
Art Unit 2852

QG